Minutes of the APSUO Steering Committee Meeting Held on January 17, 2002, at Argonne National Laboratory

Attendees:

L. Chen, D. Cookson, S. Durbin, P. Dutta, M. Gibson, H. Grunder, D. Haeffner, L. Keefe, D. Mills, S. Muchmore, S. Strasser, T. Rauchas, A. Rosenzweig, B. Stephenson, M. Vigliocco-Hagen, and P. Zschack.

Routine Business:

Paul Zschack, APSUO Chair, called the meeting to order and introduced Dr. Herman Grunder, Director of Argonne National Laboratory. Dr. Grunder spoke of the importance of the APS in both the science and user communities and reminded the group that he has an open-door policy and welcomes the opportunity to talk with anyone who may have concerns.

The minutes from the October 11, 2001, APSUO Meeting were approved as written. Zschack requested that the 11th User Meeting post mortem portion of those minutes be added to the executive session agenda for this meeting.

Additional items to be discussed during the Executive Session are the election of a vice-chair for the APSUO and the interactions with other user communities.

APS Update:

Dr. Gibson presented an update of the status of the APS. Budgetary issues were discussed, among them the financial constraints that have been placed upon the APS and the user community during this fiscal year. Dr. Gibson will be meeting with the DOE in Washington, D.C., on February 21, 2002, to discuss the APS budget.

The APS is still awaiting the written recommendations from the DOE Review conducted in October 2001. In their oral closeout, the review group was very positive about the machine and its operation. The outside perception that the APS is a "closed shop" must be looked at closely. It was also emphasized that there should be more support for users.

Future planning issues were also discussed. Dr. Gibson presented a draft APS mission statement and goals. Attendees were asked to review these drafts and offer any input.

Dr. Gibson informed the group that an APS/user retreat is being planned for May 15-17, 2002, in Lake Geneva, Wisconsin. There will be approximately 40 APS representatives in attendance. Gibson has suggested to CAT Directors that each send two representatives (one from the scientific community and one from the technical arena). Members of the APSUO Steering Committee are also invited to attend. Reasonable expenses will be covered by the APS.

A critical issue is the need to improve communication and partnership between the APS and users. Tools that are currently being used or planned to enhance this partnership are

the retreat in May, CAT Director and user one-on-one discussions, CAT Chats, and TWG meetings. Members are asked to suggest other methods that could be used in the future.

Another very important issue identified by Gibson is user support. Potential new areas for this support are CAT liaisons, computer support, a detector pool, optics development, and enhanced biology expertise within the APS. Members were also asked to suggest additional areas where user support could be improved.

The Independent Investigator program is very important for the APS. A task force will be formed to evaluate this program and offer improvements to the present situation. The APSUO was asked to suggest users to serve on this task force.

Operational Update:

Tony Rauchas gave the group an operational update. Thus far in FY2002, the APS is at 96.6% of beam availability. During FY2001, availability was 95.8%.

Three user runs and three maintenance periods are planned for FY2003. The runs are scheduled for early October through mid December, late January through mid April, and late May through late August. User operation hours are planned at 5080 hours, with 75% of those hours being at low emittance top-up mode. Other potential improvements for FY2003 include further optimized emittance/coupling, higher peak current, and higher single bunch current.

Beam position limit detectors (BLPDs) are protection circuits that ensure that the stored beam orbit through the insertion devices (ID) is not mis-steered, which would cause ID photon radiation to strike storage ring components. In order to optimize the photon trajectory in the beamlines, the storage ring orbit in some sectors is close to the BPLD limits. The low-emittance lattice requires non-zero dispersion in the ID straight sections. Minor variations in voltage cause minor changes in energy, resulting in position changes through the IDs. Changes in orbits are detected by BLPDs, causing beam trips. The corrective action for this situation is to bring the orbit back to the center of the vacuum chamber. This action will minimize BPLD beam trips and provide a larger dynamic aperture with improved injection efficiency and improved lifetime. However, this action may impact the CATs by requiring beamline components to be realigned to reestablish optimum transmission. Currently, a proposal/plan for this action is being prepared for presentation to the CATs.

The contractor for the HP-CAT experimental stations (Fabcast) will be returning on February 18 to finish its remaining construction, which will require approximately 12 weeks. Since local union labor was not being employed in this endeavor, the millwrights union set up pickets at the Fabcast gates and observers at all other ANL gates. Other construction trades did not cross the observer line, therefore stopping construction activities at ANL. An election is scheduled for February 22, 2002, for Fabcast workers giving them the option to join the union if they wish.

Review of High-Current Workshop:

Denny Mills summarized the recent workshop on higher currents at the APS. An excellent turnout (68 attendees) indicated that this is a topic of interest to APS users. In regard to increasing currents, going to 130-150 mA may be a reasonable first step, because there is little cost to the accelerator and front ends associated with such an increase. A test of higher current operation during machine studies will be conducted prior to the May retreat. Results of these tests will be discussed at that time. APS will be distributing a list of options for increasing brilliance at the APS together with a description of the tradeoffs for each option. CATs will be asked to examine the impact of each option on their beamlines/science and prepare a written response to the APS in advance of the retreat.

Executive Session:

Vice-Chair Election:

Nominations were taken for the position of vice-chair of the Steering Committee. One of the major duties of the vice-chair will be to plan the scientific program for the 12th User Meeting, which will be held in the spring of 2003. At that time, the vice-chair will assume the duties of APSUO chair and will serve in that capacity until the fall of 2004. After considerable discussion, Steve Durbin was unanimously elected.

Other Assignments:

The APSUO has been represented on the APS Library Committee, the APS Colloquium Committee, and the Promotional Advocacy Group. These appointments will be discussed further at the next meeting.

Independent Investigator Task Force:

The Steering Committee voted to have David Cookson, Lisa Keefe, and John Rose serve as APSUO representation on the APS Independent Investigator Task Force. It was also recommended that an Independent Investigator be selected to serve as well.

User Meeting Issues:

The Steering Committee talked at length about the past User Meeting and suggest areas to consider when planning the next meeting. Some of these areas are:

- 1. Should there be a keynote speaker?
- 2. Possibly look at the Illinois Outreach Program with the intention of reaching non-university personnel. Would it be feasible to invite these types of people to our meeting?
- 3. A different facility for posters is definitely needed for the next meeting.
- 4. Possibly hold an X-ray Neutron School Alumni Workshop in conjunction with the next User Meeting.

Action Items:

For Steering Committee members:

- 1. Draft a letter of support for the establishment of an APS detector pool from the APSUO Steering Committee to the APS. Circulate the draft and obtain Steering Committee member approval before sending the letter to the APS. (Paul Zschack)
- 2. Review draft APS mission statement and goals and send comments to S. Strasser for discussion at the May retreat. (All Steering Committee members)
- 3. Identify areas for increased APS support of users and send ideas to S. Strasser prior to the April 11, 2002, Steering Committee meeting. This topic will be discussed at the April meeting and a final prioritized list will be submitted to the APS for discussion at the May User/APS retreat. (All Steering Committee members)

For the APS:

- 1. Address the issue of advocacy actions by non-U.S. citizen users residing in foreign countries and advise the Steering Committee accordingly. (APS/UPD management)
- 2. Place a discussion of the function of the APSUO Steering Committee on April 11, 2002, executive session agenda. (Susan Strasser)
- 3. Prepare and distribute to Steering Committee members a brief informational update on APS CAT missions and capabilities. (Susan Strasser)
- 4. Furnish to M. Gibson a list of Independent Investigators to serve as potential candidates for the Independent Investigator Task Force. (Susan Strasser)
- 5. Provide a statistical report to the Steering Committee on the first electronic APSUO Steering Committee election. Include percentage of those voting who attended the meeting, as well as the percentage of total votes from non-attendees. Include percentage of votes cast at the meeting. (Linda Carlson)

Added after the meeting: Voting Statistics: In the 2001 election for APSUO Steering Committee members (the first to be conducted electronically), a total of 184 votes were cast. Of these, 86 (47%) came from meeting participants. Of the 86 votes cast by meeting participants, 74 (86%) voted before the meeting and 12 (14%) voted at the meeting.

In the previous (October 1999) Steering Committee election, which was held at the APSUO business meeting in conjunction with the Tenth Users Meeting using paper ballots, a total of 92 ballots were cast.

Next Meeting:

The next meeting of the APSUO Steering Committee will be held on April 11, 2002.